

SELECT CAREERS

METHODOLOGY

Medical Assistants
Alternate Titles: Registered Medical Assistant, Ophthalmic Assistant, Certified Ophthalmic Technician, & Chiropractic Assistant

Alameda County

What Do Medical Assistants Do?
Medical Assistants perform administrative and certain clinical duties under the direction of physicians. Administrative duties may include scheduling appointments, maintaining medical records, billing, and coding for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, and administering medications as directed by physician.
(Source: SOC 31-9092 — see Sources Page)

What are the Work Activities and Tasks?
Listed below are the top 10 work activities and tasks that Medical Assistants perform. (Source: O*NET — see Sources Page)

Attention: Place cursor on the lines below to see the full description.

- Interview patients to obtain medical information
- Prepare patients for examinations and treatments
- Record patients' medical information and vital signs
- Prepare and administer medications as directed by the physician
- Collect laboratory specimens and prepare them for testing
- Explain treatment and physicians' instructions to patients
- Help physicians examine and treat patients
- Authorize drug refills and provide prescription information
- Prepare treatment rooms for patient examinations
- Clean instruments and dispose of contaminated supplies

Job Description 2005

Survey information represents 17 firms that employ 117 Medical Assistants in Alameda County.

What Working Conditions Can I Expect?
Medical Assistants work in well-lit, clean environments. They constantly interact with other people and may have to handle several responsibilities at once. Most full-time Medical Assistants work a regular 40-hour week. Some work part-time, evenings, or weekends.
(Source: Occupational Outlook Handbook — see Sources Page)

Where Do Medical Assistants Work?
Most Medical Assistants in Alameda County work in Doctors' Offices and Clinics and Hospitals.

Employment by Sector:

Employment Facility	Percentage
Hospitals	31%
Doctors' Offices and Clinics	42%
Outpatient Care Centers	14%
Mental Health Facilities	5%
Employment Services	2%
Other	5%

EDD Employment Development Department
State of California

Job Description **Wages & Benefits** **Education & Training** **Skills, Abilities, Knowledge** **SOURCES**

Job Outlook **Supply & Demand** **Career Options**

2005

Employment Development Department
Labor Market Information Division
Local Occupational Information Group
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SELECT CAREERS METHODOLOGY

SOURCES FOR SELECT CAREERS REPORTS

Introduction

Information presented in Select Careers is derived from a number of nationally recognized labor market information (LMI) data sources, including the United States (US) Department of Labor (DOL) Bureau of Labor Statistics (BLS), California's Employment Development Department (EDD) Labor Market Information Division (LMID), and Select Careers survey responses from California employers. We use the various information sources to obtain differing levels of specificity to produce a comprehensive illustration of selected occupations at the local level.

Existing Data Sets and Information Sources

O*Net

O*Net, the BLS on-line occupational information network, and the O*Net 6.0 database are the source for much of the standard occupational information presented in the Select Careers reports. O*Net is recognized as the standard for occupational information and is used by a large segment of the professional labor market information, workforce development, and educational communities. The terms and definitions presented in O*Net are understood and accepted as a national standard.

Occupational Outlook Handbook

The Occupational Outlook Handbook (OOH), published by the DOL BLS, is a nationally recognized source of career information, which describes on a national scale job-related detail such as on-the-job tasks and activities; working conditions; training and education requirements; earnings; and job prospects for a wide range of occupations.

Occupational Employment Statistics

The Occupational Employment Statistics (OES) is a Federal-State cooperative program between the BLS and State Workforce Agencies. The OES program collects data on wage and salary workers in non-farm establishments in order to produce employment and wage estimates for over 700 occupations. Data from self-employed persons are not collected and are not included in the estimates. For Select Careers, we compile OES wage data by county and multi-county consortia as defined for the Select Careers project. (See "Selection of Geographic Areas" below.)

The OES survey also produces estimates of occupational employment within industrial groups, commonly referred to as **staffing patterns**. Industries are classified by the North American Industrial Classification System (NAICS) and occupations are classified by the Standard Occupational Classification (SOC) system. OES staffing pattern estimates cover most three, four, and five-digit industrial groups in the following

industrial sectors: Agriculture, Forestry, Fishing and Hunting; Mining; Utilities; Construction; Manufacturing; Wholesale Trade; Retail Trade; Transportation and Warehousing; Information; Finance and Insurance; Real Estate and Rental and Leasing; Professional, Scientific, and Technical Services; Management of Companies and Enterprises; Administrative and Support and Waste Management and Remediation Services; Educational Services; Health Care and Social Assistance; Arts, Entertainment, and Recreation; Accommodation and Food Services; Other Services (except Public Administration); and Public Administration. We use OES staffing patterns as the basis for identifying employers by industries to be surveyed for Select Careers.

America's Labor Market Information System (ALMIS)

ALMIS is a nationwide standardized on-line data delivery system developed under the auspices of the DOL Employment and Training Administration (ETA) to make national and state industry, employment, and occupational information readily available to support the information needs of the workforce development community, One Stop Career Centers, and all other users of LMI. We use the ALMIS database to identify major employers by industry to identify "Some Major Employers in the County" on the Supply and Demand Page.

SELECT CAREERS SURVEYS

a. Selection of Occupations

For 2005 Select Careers, we used long-term statewide projections to identify 25 high-growth occupations that offer relatively high median wages, stability, and potential for career advancement. We also targeted for selection occupations that represent blue-collar, clerical, technical, and professional types of jobs. Further, we limited the occupational concentration by industry classification to avoid placing excessive burden on employers who would be asked to participate in our occupational surveys.

Beginning in program year 2006, occupations will be nominated for Select Careers Reports by California's 50 Local Workforce Investment Areas (LWIA). Each LWIA will be invited to identify the top 25 occupations of importance for their local economy. We will tally the nominees submitted by the LWIAs to identify the top 25 occupations for study in 2006.

b. Selection of Geographic Areas

The selection of geographic areas for Select Careers was based on the geographic areas represented by the California Cooperative Occupational Information System (CCOIS), a joint state-local program that addressed the needs of California's local workforce development communities for local occupational information between 1986 and 2004. For Select Careers, we divided the state into 32 geographic areas consisting of 23 individual counties and 9 multi-county consortia. In some cases there have been

long-standing working agreements between the counties that make up the consortia. For other cases, the collaborative agreements are more recent and reflect changes that occurred in workforce development communities as a result of the Workforce Investment Act of 1998. The 32 geographic areas include:

- | | | |
|------------------|----------------------------------|----------------------------|
| ➤ Alameda | ➤ Monterey/Santa Cruz/San Benito | ➤ North Central |
| ➤ Butte | ➤ Mother Lode | Colusa |
| ➤ Contra Costa | Amador | Glenn |
| ➤ Fresno | Calaveras | Lake |
| ➤ Golden Sierra | Mariposa | Sutter |
| Alpine | Tuolumne | Yuba |
| El Dorado | ➤ NoRTEC | ➤ Orange |
| Nevada | Del Norte | ➤ Riverside/San Bernardino |
| Placer | Lassen | ➤ Sacramento/Yolo |
| Sierra | Modoc | ➤ San Diego |
| ➤ Humboldt | Plumas | ➤ San Francisco |
| ➤ Imperial | Siskiyou | ➤ San Joaquin |
| ➤ Kern/Inyo/Mono | Tehama | ➤ San Luis Obispo |
| ➤ Kings | Trinity | ➤ San Mateo |
| ➤ Los Angeles | ➤ North Bay | ➤ Santa Barbara |
| ➤ Madera | Marin | ➤ Santa Clara |
| ➤ Mendocino | Napa | ➤ Shasta |
| ➤ Merced | Solano | ➤ Stanislaus |
| | Sonoma | ➤ Tulare |
| | | ➤ Ventura |

c. Sample Development for the Surveys

After selecting 25 occupations for study, we identified employers to be included in county survey samples by matching OES staffing patterns to a database containing the universe of California employers. The use of staffing patterns enabled us to identify the industries and based on industry classification the firms with the greatest likelihood of employing the occupations selected for study.

Survey samples were prepared for 32 local geographic areas that represent the entire state. These local area employer samples were drawn to include a mix of large, medium and small employers, and as many industries as practical to represent the distribution of the selected occupations throughout the survey areas. Whenever possible, 100 employers were selected for each occupation in each local area and became the basis for conducting the surveys.

d. Survey Questionnaires

A standard questionnaire was used for all occupations in all geographic areas. The questionnaires were developed by LMID and designed to provide answers to questions of importance to the workforce development community, including benefits provided by employers; employer requirements for experience and training; employer assessment of whether the subject occupation is growing, declining or remaining stable; and level of difficulty experienced by employers in finding qualified applicants to fill vacancies.

e. Survey Operation

Using the local area employer survey samples, we first notified employers by postcard that a letter and questionnaire would be forthcoming and encouraged their participation in this important occupational study. Two weeks after the mailing of the pre-survey postcards, questionnaires were mailed to employers with a cover letter identifying the origin and purpose of the survey and emphasizing the importance of the employer's responses for those subject occupations that they employ. Employers could receive one to four survey questionnaires with their letters, depending on the nature of the occupations and the employers' industry classification. Two weeks after mailing of the questionnaires to employers, we mailed a follow-up post card to the same employers to thank them for their participation in the study and/or to remind them to complete the questionnaire and return it if they had not already done so.

The EDD mail distribution system includes the most current US Post Office database of address change notifications and automatically forwards mail to recipients who have submitted address change notices within the past 13 months. Mail sent to addresses that were changed more than 13 months prior to the mailing were returned to our office. As time allowed, additional research was done to seek new addresses for the firms with expired forwarding addresses and the letters with questionnaires were resent. All completed questionnaires are evaluated for consistency and completeness prior to data entry. Any unclear or inconsistent responses are clarified through follow-up phone calls to subject employers.

f. Minimum Response Goals

We use a standard sample size of 100 to 150 employers for each occupation surveyed in each geographical area, and we target a minimum response goal of 15 completed surveys for each subject occupation and area. The 15 completed survey responses must represent small, medium, and large firms and adequately cover the subject geographic area. For most occupations and geographic areas, the number of completed surveys was greater than 15. For some occupations and geographic areas, it is not possible to obtain 15 employer responses due to the nature of the work and the industry composition in the local area. In these cases, we made every attempt to contact the universe of potential employers in the area to obtain data for Select Careers Reports. Also, we found that for some questions fewer than 15 employers provided responses. If fewer than three responses were received for any one question, we do not show an aggregate employer response. Instead we state that insufficient data is available.

The actual number of responding employers and the number of people they collectively employ in the subject occupation and area is displayed on the front page of each Select Careers report in the upper right quadrant.

g. Data Entry and Tabulations

We developed a Microsoft Access database to capture survey response data, track status of responses, run data tabulations, and generate the reports needed to develop the details for Select Careers reports. As completed questionnaires are received, we enter response data into the database.

Weekly status reports are generated to identify the occupations and areas that meet or exceeded the minimum response criteria. When responses for occupations meet or exceed the minimum response criteria, we tabulate the data using the database to allow for systematic and consistent review and analysis of the survey responses for each occupation.

h. Analysis

We analyze the tabulated data, prepare numeric, graphic, and text content, and transfer the results to a standard report template with clear and easy-to-read descriptions for each subject occupation and geographic area. Each report then goes through several levels of editing and proofing to ensure that established principles of good research, documentation, and reasoning are met.

i. Publication and Update

Select Careers reports are generated in Microsoft Publisher and converted to Adobe Acrobat 6.0 PDF documents for placement on the LMID Web page following final approval in the editing process. Web-ready Select Careers reports are posted to the Web in clusters of six or seven occupations per cluster for all areas. The occupational clusters are generally related by type of occupational family or industry, such as healthcare, information technology, scientific, or education.

Each Select Careers report is clearly labeled with the year of production to enable readers to easily recognize the age of the information represented in the report. We plan to update wage and employment information in Select Careers reports annually as new data becomes available. Currently, resource limitations do not allow us to resurvey for each occupation annually. Our plan is to resurvey for published Select Careers occupations on a three-year cycle.

REPORT ELEMENT METHODOLOGY

JOB DESCRIPTION PAGE

Job Title, Description, and Standard Occupation Code

The title, description, and occupation codes for Select Careers reports are obtained from the O*Net database.

Alternate Titles

Alternate titles for the subject occupations are found in the Occupational Outlook Handbook (OOH) "Nature of Work" descriptions and O*Net database. Only the most relevant Alternate Title(s) that will fit in two lines of text on this page are selected.

Geographic Areas

Each Select Careers report includes information for a specific occupation and county or group of counties. The geographic area represented by each report is identified in the upper left header of every page of the Select Careers report.

Date of Publication

Each Select Careers report is clearly labeled with the year of production in the upper right margin of every page to enable readers to easily recognize the age of the information represented in the report.

What do [People in this Occupation] Do?

The occupational description included under "What Do [People In This Occupation] Do?" was adapted from the full description found on the O*Net Web page.

What are the Work Activities and Tasks?

The ten most important work activities and tasks listed in each Select Careers report comes from the O*Net Web page. To accommodate the space limitations of the Select Careers format, it is necessary to shorten many of the descriptions to fit the page. However, readers using Adobe Acrobat 6.0 or newer will be able to float their cursor over each of the ten work activities and tasks to see the full description. Readers using older versions of Adobe Acrobat can right click on individual lines to bring up a text box with the full text.

What Working Conditions Can I Expect?

The OOH is the source of information for working conditions that can be expected for each occupation. We condense and simplify the OOH text as needed for easy reading and to fit the space limitations of the report template.

Where Do [People In This Occupation] Work?

Information about the primary industries that employ the subject occupation is obtained from OES staffing patterns. LMID prepares a custom compilation of occupational staffing patterns based on Select Careers geographic areas for the express use of our reports. Industry employment data for the 2005 Select Careers reports is based on 2004 staffing patterns. Select Careers reports display only the top one to eight industries that employ the largest proportion of workers for the subject occupation. Additional industries identified by OES staffing patterns as employing the occupation to a lesser degree are grouped in a category called "Other."

WAGES AND BENEFITS PAGE

Wages

How Much Can I Expect to Earn?

Hourly Wages for 2005 Select Careers are based on third quarter 2004 OES wage data and reflect the 25th percentile (low), 50th percentile (median), and 75th percentile (high) wages reported by employers for the subject occupation and geographic area. The significance of the “low” hourly wage is that 75 percent of the workers in the subject occupation and area earn more than this amount and 25 percent earn less. Similarly, the “high” hourly wage indicates that 75 percent of the workers in this occupation and area earn less and 25 percent earn more than this amount. The median wage represents earnings in the middle of all wages reported by employers for the subject occupation and area. Annual wages in each category (low, median, and high) are calculated from the hourly wages of the same categories based on an annual work year of 2,080 hours. The Statewide median hourly wages also come from OES wages. Hourly wages are rounded to the nearest cent, and annual wages are rounded to the nearest \$10.00.

For the majority of occupations included in the OES Survey, both hourly and annual wage estimates are reported. Employees in these occupations typically work a standard work year; that is, a full-time employee who was paid for 40 hours per week, and for 2,080 hours year. When exceptions occur, such as the case of School Teachers who work under annual or semi-annual contract rather than for hourly wages, a notation is made that hourly wages are not available.

Please note that the LMID OES Group develops a custom wage data report expressly for the Select Careers program that is based on the geographic areas specified for Select Careers. The wages found in Select Careers may differ from the wages for the same occupations found on the LMID Web page at [http://www.calmis.ca.gov/file/occup\\$/oes\\$.htm](http://www.calmis.ca.gov/file/occup$/oes$.htm) because of differing geographic designations.

When comparisons are made between wages paid for the subject occupation and wages paid for other occupations in the same area that require similar levels of education, the terms below are used:

- | | |
|----------------------------|--|
| Pays well: | wages paid for subject occupation are in the upper third of wages paid to workers in all occupations that require similar levels of education in this area. |
| Pays about average: | wages paid for subject occupation are in the middle third of wages paid to workers in all occupations that require similar levels of education in this area. |

Does not pay as well: wages paid for subject occupation are in the lower third of wages paid to workers in all occupations that require similar levels of education in this area.

Benefits

What Percent of Medical Insurance Do Employers Pay?

Data for this section is obtained from employers' responses to the Select Careers survey. Employers were asked the question "If your firm offers medical insurance to full-time (or part-time) employees, what percentage of the premium does your firm usually pay?" The possible answers include:

- 0%
- 1 - 49%
- 50 – 99%
- 100%

We specify that full-time is 35 – 40 hours per week and part-time is 1 – 34 hours per week.

Employer responses are compiled and grouped into four categories and are presented in a pie chart. The four categories include:

- Employers who pay all the costs of medical benefits (100%)
- Employers who paid half or more of the cost of medical benefits (50 – 99%)
- Employers who paid less than half the cost of medical benefits (1 – 49%)
- Employers who paid nothing toward the cost of medical benefits (0%)

The accompanying narrative description provides a short summary statement of how the majority of employers responded to the question for both full-time and part-time employees. The following standard descriptive terms are used for the narrative summary:

<u>Term</u>	<u>Meaning</u>
All	100% of the employers responded in a certain way
Almost All	80% to 99% of the employers responded in a certain way
Most	60% to 79% of the employers responded in a certain way
Many	40% to 59% of the employers responded in a certain way
Some	20% to 39% of the employers responded in a certain way
Few	Less than 20% of the employers responded in a certain way

What Benefits Can I Expect to Receive?

Data for this section comes from employer responses to the Select Careers survey in which we ask employers to “indicate which of the following benefits your firm offers to full-time (or part-time) employees in this occupation.” In this section we show the percentage of employers that offer benefits in each of the following categories: medical, dental, vision, life insurance, disability insurance, vacation, sick leave, paid time-off bank, and a retirement plan, for both full-time and part-time employees in this occupation.

We specify that full-time is 35 – 40 hours per week and part-time is 1 – 34 hours per week.

EDUCATION AND TRAINING PAGE

Education and Training Requirements

What Education, Training, and Experience Do I Need?

Information for this section is obtained from the on-line OOH under the heading Training, Other Qualifications, and Advancement. We condense and summarize OOH information about education and training to make it suitable for the format, style, and content of Select Careers.

Training Programs

Information for this section comes from several sources depending on the subject occupation. Sources include the on-line OOH under the heading Training, Other Qualifications, and Advancement; the America’s Labor Market Information System (ALMIS) database which is the backbone for the LaborMarketInfo Web page; licensing and/or certifying entities; and labor unions. We condense and summarize information about education and training from these various sources to make it suitable for the format, style, and content of Select Careers.

Schools that Offer Training

A listing of the schools offering educational programs to prepare people for the subject occupation is found on the LaborMarketInfo Web page. Select *Training Information* on the Career Center page of www.LaborMarketInfo.edd.ca.gov, to search for education and training providers by occupation, geographic area, and training program.

Licensing Requirements

Licensing Requirements are obtained from either the appropriate licensing board for the subject occupation or the California Department of Consumer Affairs.

Experience

The information about required experience and training comes from employer responses to the Select Careers survey. The survey asks employers a series of six questions, including:

- When you hire applicants for this occupation, is prior experience in this occupation usually required?

- If yes, how much experience in this occupation is required? (number of months)
- Is experience in related occupations accepted?
- If yes, please specify the occupation and how much experience (number of months)
- Does your firm accept training as a substitute for experience in this occupation?
- If yes, how many months? (number of months)

Select Careers reports display graphically the percent of employers requiring experience, accepting related experience, or accepting training in place of experience. Responses to the questions about the number of months of experience or training required are grouped into four categories and displayed as 1 to 3 months, 4 to 6 months, 7 to 12 months, and more than 12 months. The percent of employers responding for each category is also displayed.

SKILLS, ABILITIES, AND KNOWLEDGE PAGE

What Skills, Abilities, and Knowledge are Needed?

We scripted the narrative for this section to help readers understand how the top five skills, abilities, and knowledge that follow are displayed.

What if I am Considering Educational Opportunities?

Information for this section is the result of an analysis of O*Net (Knowledge) and the on-line OOH (Training, Other Qualifications, and Advancement section).

Skills, Abilities, and Knowledge

The source for the top five skills, abilities, and knowledge and the levels of importance for each is found in the O*Net 6.0 database. Depending on the occupation, the bar charts may show up to five different importance levels each for skills, abilities, and knowledge. The relative importance of each of these qualities is shown numerically for each item. Skills, abilities, and knowledge information relates to occupations on a national scale and the importance levels may not necessarily hold true for every job in the subject occupation in California.

To accommodate the space limitations of the Select Careers format, it is necessary to shorten many of the skills, abilities, and knowledge descriptions to fit the page. However, readers using Adobe Acrobat 6.0 or newer will be able to float their cursor over each of the skills, abilities, and knowledge bars to see the full description. Readers using older versions of Adobe Acrobat can right click on individual bars to bring up a text box with the full text.

JOB OUTLOOK PAGE

What is the Job Outlook?

The 2005 Select Careers Reports were prepared with the most current data that was available at the time using Projections of Employment by Occupation 2001-2008. A

new release of projections data may have been posted to the Web since the 2005 reports were created. To view Projections of Employment by Occupation, visit the Web at <http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=145>.

Current Employment information is derived from LMID's 2001-2008 county-level Projections of Employment by Occupation. Information for Select Careers county and multi-county areas is calculated by using the straight-line method of interpolation between the first and last years shown for the subject county or group of counties. Information for multi-county consortia is combined using occupational projections data for the counties that make up the subject consortium.

Employment Forecast information comes from LMID's 2001-2008 county-level Projections of Employment by Occupation. We state the estimated growth rate for the subject occupation and area and compare this growth rate to that of all occupations in the same area. We also compare the growth rate for the subject occupation and area to the growth rate for the same occupation at the state level. The estimated total employment for the subject occupation and area at the beginning (2001) and end (2008) of the projection period are also displayed.

Occupational projection estimates for multi-county consortia are prepared expressly for the Select Careers program by the LMID Projections Unit. However, occupational projections by county are readily available on the LMID Web page at <http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=145>. Estimates for multi-county consortia can be calculated by combining occupational projections for individual counties. Occupational employment growth percentage estimates for counties and the State are also available on LMID's Web page.

The **Job Growth Rate** for the subject occupation is the employment percent change for the occupation and subject county between the first and last years of the projection cycle (2001-2008).

The **Average Growth Rate** for the subject county is the employment percent change for all occupations in the county between the first and last years of the projection cycle (2001-2008).

The **Job Growth Rate** for the subject Occupation in California is the employment percent change for the occupation for California between 2002 and 2012.

Job growth rates are obtained from LMID's Employment Projections by Occupation found at <http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=145>. When comparing projected growth rate of an occupation to average projected growth rate for all occupations in an area (county, consortium or the state), the following terms are used:

Much faster: 2.00 or more times the average for all occupations.

Faster: 1.25 to 1.99 times the average for all occupations.

About the same: 1.24 to -1.24 times the average for all occupations.

Slower: -1.25 to -1.99 times the average for all occupations.

Much Slower: -2.00 or more times the average for all occupations.

Annual Job Vacancies

Job vacancy information represents the number of new jobs created and the number of job openings that occur due to separations. Total job vacancies are calculated by adding these two numbers. The new jobs created and job separations numbers are obtained from LMID's Web Page, Employment Projections by Occupation. The number of job openings for counties is calculated by dividing the total number of vacancies in both categories by the number of years represented by the projections. Similarly, job openings for multi-county consortia are calculated based on combining job openings numbers for the counties that make up the subject consortium.

The narrative for Job Openings captures employer information that is obtained from Select Careers surveys in which we ask the questions:

- "Has your firm hired in this occupation in the past 12 months?"
- "If yes, how many hires filled vacant positions?"
- "If yes, how many hires filled new positions?"

Employers Hiring Plans

This section summarizes employer response data obtained from Select Careers surveys. The percentages presented reflect responses to the question: "Over the next 12 months, do you expect your firm's employment in this occupation to decline, remain stable, or grow?"

Please note that this summary data does not capture information about new employers that might start businesses and hire new employees in the future. LMID's Occupational Projections Unit attempts to capture information about new businesses entering the local economy in their employment forecasts.

SUPPLY AND DEMAND PAGE

Are Qualified Applicants Available?

Information about the availability of qualified experienced and inexperienced applicants is derived from the Select Careers survey in which we ask the following questions:

- How difficult is it for your firm to find experienced and qualified applicants for this position?

- How difficult is it for your firm to find inexperienced but qualified applicants for this occupation?

Possible responses to these questions include:

- Not difficult
- Somewhat difficult
- Moderately difficult
- Very difficult

Responses to these questions are summed based on the four levels of difficulty of recruitment and percentages are calculated for each level. The findings are presented in pie charts that show the level of difficulty that employers have recruiting for experienced and inexperienced applicants.

What Does This Mean To Me?

We apply four standard statements about the relative ease or difficulty that qualified applicants will have in finding a job. These statements are directly related to the employer reported levels of difficulty in finding qualified applicants for recruitment.

- When half or more of the employers respond that it is **not difficult** to find qualified applicants, we state, “Qualified applicants may find there are more applicants than positions when looking for work in this occupation and area.
- When half or more of the employers respond that it is **somewhat difficult** to find qualified applicants, we state, “Qualified applicants may need to spend more time looking for available positions when looking for work in this occupation and area.
- When half or more of the employers respond that it is **moderately difficult** to find qualified applicants, we state, “Qualified applicants will have a fairly easy time finding work in this occupation and area.
- When half or more of the employers respond that it is **very difficult** to find qualified applicants, we state, “Qualified applicants will have an easy time finding work in this occupation and area.

Basically, the more difficult it is for employers to fill vacancies, the easier it is for applicants to find a job; and conversely, the easier it is for employers to fill vacancies, the more difficult and competitive it is for applicants to find a job. These responses, when analyzed together with projections information and employers’ requirements for prior experience and/or training, allow for an assessment of what an applicant will encounter when looking for work in the subject occupation and geographic area.

Where Can I Find a Job?

Information about the primary industries that employ the occupation is obtained from OES staffing patterns. LMID prepares a custom compilation of occupational staffing patterns based on Select Careers geographic areas for the express use of our reports. Industry employment data for the 2005 Select Careers reports is based on 2004 staffing patterns. Select Careers reports display only the top one to eight industries that employ the largest proportion of workers for the subject occupation. Additional industries

identified by the staffing patterns as employing the occupation to a lesser degree are grouped in a category called "Other."

Some Major Employers

The listing of a few major employers of the subject occupation in the subject county/consortium comes from a commercial database called infoUSA. InfoUSA is included in the ALMIS database, which serves as the backbone for the LMID LaborMarketInfo Web page. The infoUSA database is updated twice each year. The phone numbers shown in Select Careers reports, in most cases, are the job lines for these employers and can be used by readers to contact the employers to inquire about job openings. We called each of the major employers listed to request permission to include them in Select Careers and to verify the phone numbers that job seekers should use.

America's Job Bank

We have included information and a link to America's Job Bank to facilitate job search activities of job seekers.

One Stop Career Centers

For those job seekers who would like assistance with understanding their career options, guidance with their job search activities, or direction for training opportunities, we recommend that they visit their nearest One Stop Career Center. A link to America's Service Locator is included to assist readers in finding the nearest One Stop Career Center.

CAREER OPTIONS PAGE

The Career Options page is meant to help readers recognize the many potential career options that are available related to the subject occupation. Each box displays the occupation title, median annual salary, and the minimum level of education or training required.

Occupations that have approximately the same set of skills, abilities, knowledge, and general work activities, each with an importance level greater than 50 as defined by O*Net, were considered for placement on this page. Up to 30 of the most closely related occupations were selected for placement on this page.

Each of the occupations shown on this page is related to the subject occupation in that they all build on the same set of skills, abilities, knowledge, and general work activities. At the lowest level, minimal training is required as individuals begin to develop a set of skills, abilities, and knowledge while performing the most basic work activities that apply to each of the occupations shown. As one moves up the rows of occupations, more education and/or training is required and the individual continues to acquire additional levels of expertise for the same skills, abilities, and knowledge. To facilitate additional

research by interested readers, we have linked each of the occupation boxes directly to the O*Net web page that applies to that occupation.

Information for this page is based on extensive analysis using the O*Net 6.0 database, the OOH, and LMID's Web page. Skills, abilities, knowledge, and work activities are obtained from the O*Net Domain files (Knowledge, Skills, Abilities, and Work Activities) in the O*Net 6.0 database. Wage information comes from the 2004 OES Statewide wages, which can be found on the LMID Web page at [http://www.calmis.ca.gov/file/occup\\$/oes\\$.htm](http://www.calmis.ca.gov/file/occup$/oes$.htm). For some occupations, insufficient wage data is available and in such cases a note will be included stating "wages not available." Education and training information comes from BLS and is included in the California Occupational Projections (2002-2012) and County Occupational Projections (2001-2008) found on the LMID Web page at <http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=145>.

SOURCES PAGE

What Sources are Available for Additional Information?

In this section you will find direct links to the sources of the information we use to develop Select Careers reports along with brief explanations to help you locate the pages with information related to the subject occupation.

ACRONYMS

ALMIS	America's Labor Market Information System
BLS	Bureau of Labor Statistics
CalCRN	California Career Resource Network
Calmis	California's Labor Market Information System
CCOIS	California Cooperative Occupational Information System
DOL	(United States) Department of Labor
EDD	Employment Development Department
EDD	(California) Employment Development Department
ETA	Employment and Training Administration
LMI	Labor Market Information
LMID	Labor Market Information Division
LWIA	Local Workforce Investment Agency
NAICS	North American Industry Classification System
O*Net	Occupational Information Network
OES	Occupational Employment Statistics
OOH	Occupational Outlook Handbook
SOC	Standard Occupational Classification